

Attorney Docket No. LWEP:104aUS
U.S. Patent Application No. 10/728,530
Reply to Office Action of March 30, 2005
Date: June 1, 2005

Amendments to the Drawings

The attached sheets of drawings includes changes to Fig. 2, the deletion of new Figure 3 submitted in the Reply dated November 23, 2004, and a renumbering of new Figure 4, submitted in the Reply dated November 23, 2004, to Figure 3. This sheet, which includes Fig. 2, replaces the original sheet that included Fig. 2. At the Examiner's suggestion, multiple identical circuit boards 50, previously depicted in Figure 3, now deleted, are now shown in amended Figure 2. Figures are shown in the appendix attached at the end of this Reply.

Remarks

Objection to Claim of Foreign Priority

The Examiner has stated that Applicant has not complied with one or more conditions for receiving the benefit of an earlier priority date under 35 U.S.C. § 120. Specifically, the Examiner states the disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirement of 35 U.S.C. § 112, first paragraph.

In a previous Office Action, the Examiner objected to new matter allegedly submitted in a preliminary amendment filed December 8, 2003. As explained below, Applicant has amended Claims 6 and 12 to remove the alleged new matter. Applicant respectfully submits that Claims 6 and 12 in this Reply contain no new matter and are supported by the parent patent and consequently by the priority document. In light of the amendments to Claims 6 and 12, Applicant respectfully requests reconsideration and removal to the objection to the claim of foreign priority under 35 U.S.C. § 120.

Amendment to the Drawings

The Examiner objected to the drawings as not depicting every feature of the invention specified in the claims. Specifically, the Examiner noted that the feature related to the arrangement of a motor and/or a lamp in the control and power supply box as claimed in Claims 6 and 12 was missing from the drawings. Applicant thanks the Examiner for noting this omission. Applicant has amended Figure 2 to include a schematic of a motor (reference number 9) positioned in a microscope stand (reference number 32) and a lamp 28 positioned in the box housing control and power supply 34.. The amended figure is attached in an Appendix at the end of this paper.

As discussed below, Applicant has amended Figure 2 to reflect the claim element of two or more identical circuit boards.

Finally, Applicant has deleted Figure 3, originally submitted in the Reply dated November 23, 2004 and has renumbered new Figure 4 to Figure 3.

Amendment to the Specification

Applicant has amended Paragraph 0010 of the specification to include a brief description of Figure 3 in the “BRIEF DESCRIPTION OF THE DRAWINGS” section.

Applicant has amended Paragraph 0021.1 of the specification to delete that use of “at least one” standardized circuit board in the control and power supply unit 34. Applicant has added the use of “two or more identical” circuit boards in the control and power supply unit 34. Support of this amendment can be found in original paragraph 0008 describing the use of multiple identical circuit boards. Applicant courteously points out that Paragraph 0006 describes the use of a box in which at least one control and power supply unit is installed and that the box is arranged separately from the microscope stand. Clearly, the multiple circuit boards described in Paragraph 0008 are installed in the separate box as that box contains the control and power supply units which comprise the multiple identical circuit boards. Additional support can be found in United States Patent No. 6,717,725 (“the ‘725 patent) Col. 1 line 66-Col. 2, line 2, which is the parent patent of the instant application.

Objection under 35 U.S.C. § 132 (New Matter)

The Examiner has objected to the preliminary amendment filed December 8, 2003 under 35 U.S.C. § 132 as introducing new matter. Specifically, the Examiner states that the brief description of Figure 3, Figure 3 itself, and the description of the structure in new paragraph 0021.1 introduce new matter in the form of the ‘at least one slide-in standardized circuit board” in the control and power supply unit as claimed in new Claims 6 and 12. Applicant thanks the Examiner for pointing out this material.

As discussed below, Applicant has amended Claims 6 and 12 to remove the claim limitation “two or more standardized circuit boards” and replaced it with “two or more identical circuit boards.” As noted above, Applicant has deleted Figure 3 and included the claim element of “two or more identical circuit boards” in amended Figure 2. In light of the amendments to Claims 6 and 12, Applicant respectfully requests reconsideration and removal of the new matter objection.

Rejection of Claims 6-17 under § 112, first paragraph

The Examiner has rejected Claims 6-17 under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement. The Examiner states that the claims contain subject matter which is not described in the specification so as to convey that the Applicant had possession of the claimed invention at the time of filing. Applicants have amended Claims 6 and 12 and request reconsideration of the rejection and passage to allowance of those claims.

Applicant has amended Claims 6 and 12 to delete the claimed limitation of “two or more standardized circuit boards” and to add the limitation “two or more identical circuit boards.” This claim limitation is described in amended paragraph 0021.1 of the specification. In addition, paragraph 0008 describes the use of “multiple identical circuit boards” for use with different types of microscope stands. (See above the discussion of the amendment to the specification.) Because amended Claims 6 and 12 contain no new matter, Applicant respectfully requests reconsideration and removal of the rejection of Claims 6 and 12 under § 112, first paragraph.

Claims 7-11 and 13-17 depend from Claims 6 and 12, respectively and therefore incorporate all the limitations of those claims. Because the amendments to Claims 6 and 12 remove the new matter deficiency and add a new limitation supported in the specification of the instant application and the parent patent, Applicant respectfully submits that Claims 7-11 and 13-17 no longer contain new matter. Applicant respectfully requests reconsideration and removal of the rejection of those claims under § 112, first paragraph.

The Examiner has rejected Claims 10 and 16 under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement. The Examiner states that Claims 10 and 16 contain subject matter that is not described in such a way as to reasonably convey to one skilled in the relevant art that the Applicant has possession of the invention at the time the application was filed. Applicant has amended Claims 10 and 16 and respectfully traverses this rejection and requests reconsideration.

Applicant has amended both Claims 10 and 16 by deleting the term illumination unit and replacing it with the term "lamp." Applicant respectfully point out that paragraph 0020 describes the connection of control and power unit 34 to a microscope stand by means of a light guide to enable the transport of light from a lamp within the control and power supply box to the optical path of the microscope stand. [See Paragraph 0020 – "By using a light guide, the light generated by a lamp (not depicted) in control and power supply unit 34 is transported into microscope stand 32, where it is coupled in suitable fashion into the optical beam path of microscope stand 32 and illuminates a specimen."'] (Emphasis added.) See also col. 4, lines 8-13 of the parent patent.

While the Examiner correctly states that a transformer is in the box, Applicant respectfully points out Paragraph 0021 also clearly describes a lamp within the box, and a light guide cable transferring light from the lamp in the box to the microscope stand thus providing a clear written description of Claims 10 and 16. Moreover, the cited lines clearly differentiate between a lamp in the box and a lamp in the microscope. Applicant respectfully requests reconsideration and removal of the rejection of Claims 10 and 16 under § 112, first paragraph.

The Examiner has rejected Claims 6-17 under 35 U.S.C. § 112, first paragraph for failing to comply with the enablement requirement. Applicant has amended Claims 6 and 12 to remove the limitation of two or more standardized circuit boards and added the limitation two or more identical circuit boards. Applicant respectfully traverses the rejection of the amended claims and requests reconsideration.

Applicant courteously points out that the original specification as filed and the parent application both specifically describe the use of multiple identical circuit boards. (See paragraph 0008 of the instant application as well as the parent application, the '725 patent col. 1, line 66 to col. 2, line 2.) As noted previously, the specification describes the use of multiple circuit boards in the context in which a single box can be equipped with multiple circuit boards that can be used with different microscopes. See paragraph 0008, lines 21-23 describing the concept in which different individual circuit boards do not have to be produced for each microscope stand as multiple (two or more) identical circuit boards that work with different microscopes can be

installed in a single box. Applicant respectfully submits that it would be obvious to one of ordinary skill in that art to connect the circuit board to the motor or lamp as these are components that a microscope user would want to control when using a microscope.

Applicant respectfully notes that the term "identical" as used in Claims 6 and 12 is seen in paragraph 0008 and refers to circuit boards of the same physical size and shape that would fit into a single box. As described in the instant application, the term "identical" does not refer to identical circuits on the circuit boards as the specification clearly describes the use of a single box attached to different microscopes which would clearly require circuit boards holding different electrical circuits. Just as clearly, it would be preferable to use circuit boards with the same physical shape and size to fit into the box having only a single size and shape.

Applicant respectfully asserts that undue experimentation would not be needed to make identical circuit boards as the use of identical circuit boards in a box is described in the issued parent '725 patent. In both the instant application and the '725 patent, control and power supply units are described that house controls and power supplies for a lamp, motors and other components. Moreover, both the instant application and the parent patent describe the use of circuit boards in the box which is analogous to the control and power supply unit. Consequently, it can be seen that the specification of the instant application clearly enables a person of ordinary skill in the art to make two or more circuit boards of identical size that fit into a box or control and power supply unit to control a lamp and/or motor in a microscope. Applicant respectfully requests reconsideration removal of this rejection under § 112, first paragraph for lack of enablement.

Claims 7-11 and 13-17 depend from Claims 6 and 12, respectively, and therefore incorporate all the limitations of those claims. Because, as discussed above, the instant application does enable amended independent Claims 6 and 12, Applicant respectfully submits that Claims 7-11 and 13-17 are also enabled. Applicant respectfully requests reconsideration and removal of the enablement rejection of those claims.

The Examiner has rejected Claims 10 and 16 under 35 U.S.C. § 112, first paragraph as failing to comply with the enablement requirement. The Examiner states that Claims 10 and 16 contain subject matter that is not described in such a way as to enable one skilled in the relevant art to make and use the invention. Applicant has amended Claims 10 and 16 and respectfully traverses this rejection and requests reconsideration.

Applicant courteously notes that Claims 10 and 16 have been amended to replace the limitation "illumination unit" with the limitation "lamp." Regarding both Claims 10 and 16, the Examiner states that the disclosure does not provide support for an illuminating system having an illumination in a box housed in a control and power supply unit, a lamp in a microscope stand and cable for guiding light from the illumination unit to the microscope. However, Applicant respectfully notes that as claimed in Claims 10 and 16 the claimed lamp is located inside the box not in the microscope stand itself. Also, the lamp is not located in a box separate from the control and power supply unit but is housed with the control and power supply unit. Applicant refers the Examiner to Claims 6 and 12 from which Claims 10 and 16, respectively, depend. Claims 6 and 12 both describing a box "including at least one control and power supply unit, said box arranged physically separate from said microscope stand..." which clearly describes that the control and power unit is claimed as housed within (or perhaps on) a box separated from a microscope or microscope stand. Emphasis added. Consequently, in Claims 10 and 16, when a lamp is claimed within said box, it is separate from the microscope stand and not within the microscope stand as stated by the Examiner. Applicant notes paragraph 0021, lines 5-8 of page 6, describing the automated microscope system claimed in Claims 10 and 16. Applicant respectfully requests reconsideration and removal of the rejection of Claims 10 and 16 under § 112, first paragraph for lack of enablement.

Objection to Claim 12

The Examiner has objected to Claim 12 stating that it is unclear about the function or relationship of the control and power supply unit recited in Claim 12 with the other components of that claim. Applicant points out that the "box" claimed in Claim 12 includes at least one

control and power unit and that the at least one control and power unit includes two or more identical (in size) circuit boards that control functions of various types of microscopes. Thus, it can be seen that the box is analogous to a housing that holds at least one control and power unit.

The § 103 (a) Rejections of Claims 6-9, 11-15 and 17

The Examiner rejected Claims 6-9 and 12-15 under 35 U.S.C. § 103 (a) as obvious over U.S. Patent No. 5,559,631 to Remer, et al. ("Remer" or "the Remer patent") in view of U.S. Patent No. 5,103,338 to Crowley, et al. ("Crowley" or "the Crowley patent"). Applicant has amended Claims 6, 12, and 16 and respectfully traverses these rejections.

To establish a *prima facie* case of obviousness there must be some suggestion or motivation to modify the reference of references. Also, the reference or combination of references must teach or suggest all limitations of the claim at issue. The teaching or suggestion to make the combined combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Applicant courteously points out that independent Claims 6 and 12 both claim an automated microscope system having a microscope including a stand and a box in which the lamp for the microscope is housed within the separated box which is separate from the microscope. Applicant respectfully notes that in the Remer patent, the lamp or illumination source is located in the microscope stand itself and not in the power supply box. Note reference nos. 4 and 5 in Figure 1 of Remer each depicting a lamp located within or attached to the microscope stand itself. See col. 3, lines 9-11 describing the location of main light source 4 and secondary light source 5 on the microscope stand 1. Similarly, Crowley only shows a light source on the microscope stand itself.

Moreover, although the Examiner states that connection of switches to a circuit board is suggested by the Crowley patent, Applicant respectfully point out that the circuit board of Crowley is attached or mounted on the microscope itself. See Figures 6 and 7. Applicant respectfully submits that neither Remer nor Crowley, either alone or in combination, suggest or

teach the positioning of a microscope lamp in and separate housing or box a connected to a microscope by a light guide. Applicant notes that the claimed system allows for the use of smaller microscope stands due to the lack of a lamp on the stand itself and also allows for a smaller working space by reducing the size of microscope stands both of which are one of the objectives of the patent application. (See paragraph 0008 of the specification.) Therefore, because neither Remer or Crowley, either alone or in combination, suggest or teach a microscope illumination source, such as a lamp, located in box separate from a microscope stand, Applicant respectfully submits that an inventor looking to remove a lamp from a microscope to reduce the size of a working space around a microscope or microscope stand would not look to the Remer or Crowley patents, either alone or in combination as they do not teach or suggest that element of the claimed invention. Thus, Applicant respectfully submits that the Remer and Crowley patents, either alone or in combination, fail to render Claims 6 and 12 obvious under § 103 (a). Applicant respectfully requests reconsideration and passage to allowance of those claims.

If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. Claims 8 and 9 and Claims 13-15 depend from Claims 6 and 12, respectively, and thus incorporate all the limitations of those respective claims. Because, as discussed above, the Remer and Crowley patents fail to anticipate all the elements of Claims 6 and 12, they also fail to render obvious Claims 8 and 9 and Claims 13-15. Applicant respectfully requests the removal of the rejections of Claims 8 and 9 and Claims 13-15 and passage to allowance of those claims.

The Examiner rejected Claims 6-9, 11-15, and 17 under 35 U.S.C. § 103 (a) as obvious over U.S. Patent No. 5,566,020 to Bradford, et al. ("Bradford" or "the Bradford patent") in view of U.S. Patent No. 4,862,279 to Tsumazawa (the "279 patent") and the Crowley patent. Applicant has amended Claims 6 and 12 and respectfully traverses the rejections of these claims.

Similar to the discussion above, Applicant notes that in the Bradford patent, the illumination source is not located within the control box 18 which contains the power supply in the disclosed Bradford system. This is in contrast to the invention claimed in Claims 6 and 12

both of which specifically claim a microscope system in which the lamp is located within the box or power supply. Applicant further respectfully points out that the motor, also claimed as within the box in Claims 6 and 12, is located on the microscope itself in Bradford. Finally, Applicant respectfully notes that the lamp in Bradford is positioned in a housing separate from both the microscope and power supply of Bradford. Thus, the addition of this third component actually teaches away from Applicant's stated objective of decreasing work space by adding a third component. In addition, as noted above, Crowley only teaches a single circuit board located on or within the microscope stand, not in a separate housing or box connected to the microscope stand. Therefore, Applicant submits that all the limitations of Claims 6 and 12 are not disclosed, taught, or suggest by the Bradford, Crowley or '279 patents and that in fact the Bradford patent teaches away from Applicant's Claims 6 and 12. Thus, these references fail to render Claims 6 and 12 obvious under § 103 (a). Applicant respectfully requests reconsideration and passage to allowance of those claims.

If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. Claims 8, 9, and 11 and Claims 13-15, and 17 depend from Claims 6 and 12, respectively and thus incorporate all the limitations of those respective claims. Because, as discussed above, the Remer and Crowley patents fail to anticipate all the elements of Claims 6 and 12, they also fail to render obvious Claims 8, 9, and 11 and Claims 13-15, and 17. Applicant respectfully requests the removal of the rejections of Claims 8, 9, and 11 and Claims 13-15, and 17 and passage to allowance of those claims.

Note: The Examiner listed the '279 patent as a reference against Claims 6-9, 11-15 and 17, but made no specific reference as to how it renders the claims obvious. Consequently, no Applicant made no remarks regarding the '279 patent.

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Conclusion

Applicant respectfully submits that the present application is now in condition for allowance, which action is courteously requested. The Examiner is invited and encouraged to contact the undersigned attorney of record if such contact will facilitate an efficient examination and allowance of the application.

Respectfully yours,



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Appendix